



DEQING HUAYING ELECTRONICS CO.,LTD.

# APPROVAL SHEET

## SAW BANDPASS FILTER PART NO.: NDFG026-2595SA

<b>Product Type:</b>		<b>Customer:</b>	
SAW Filter			
<b>Part NO.:</b>		<b>Customer Part NO.:</b>	
NDFG026-2595SA			
<b>Ver. Ctrl.:</b>		<b>Issued Date:</b>	
SFG026 -2595SA -170518-v1.0			

PREPARED BY	CHECKED BY	APPROVED BY

Part No.	:	NDFG026-2595SA
Pages	:	8
Data	:	2017-5-18
Revision	:	SFG026 -2595SA -170518-v1.0

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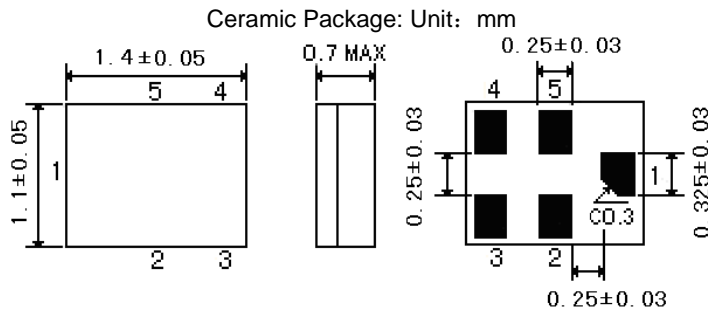
<b>Revision</b>	<b>Date</b>	<b>Description</b>	<b>Remark</b>
SFG026 -2595SA -170518-v1.0	2017-5-18	First draft	

**Features**

SAW filter for BAND 41 Post PA Tx.

1. Low-loss RF filter for mobile telephone
2. Usable passband 120 MHz
3. 50 Ω / 50 Ω Unbalanced to unbalanced operation
4. Low insertion attenuation
5. Package size 1.4 mm \*1.1 mm

**Package Dimensions**



**Pin Configuration**

1	Input
4	Output
2,3,5	Ground

**Marking**



Top View, Laser Marking

"26": Part number

"." Dot marking, indicates input 1

"1": Terminal1

The first "\*" : Month Code (The code shown below varies in a 4-year cycle)

Month	1	2	3	4	5	6	7	8	9	10	11	12
2016/2020	n	p	q	r	s	t	u	v	w	x	y	z
2017/2021	A	B	C	D	E	F	G	H	J		L	M
2018/2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019/2023	a	b	c	d	e	f	g	h	i	j	k	m

The second "\*" : Date Code

<b>data</b>	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
<b>code</b>	A	B	C	D	E	F	G	H	J	K	
<b>data</b>	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	
<b>code</b>	L	M	N	P	Q	R	S	T	U	V	
<b>data</b>	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st
<b>code</b>	W	X	Y	Z	a	b	d	e	f	g	h

## Maximum Ratings

Rating		Value	Unit
DC Voltage (between any Terminals)	$V_{DC}$	10	V
RF Power (in BW)	$P$	29 dBm max	
Operating Temperature Range	$T_A$	-30 ~ +85	°C
Storage Temperature Range	$T_{stg}$	-40 ~ +85	°C

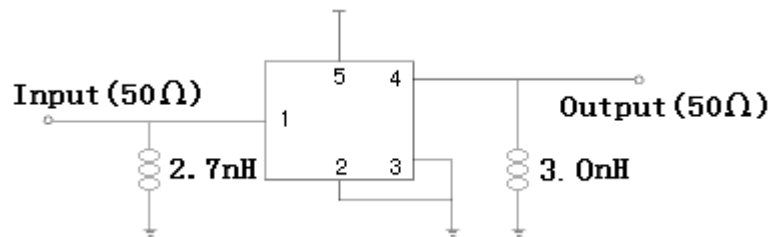
## Electrical Characteristics:

Item		Minimum	Typical	Maximum	Unit
Center Frequency	$f_c$		2595		MHz
Insertion Loss	@2535 .... 2545 MHz		2.2	3.2	dB
	@2545 .... 2635 MHz		1.9	2.6	
	@2635 .... 2655 MHz		2.2	2.8	
Passband Ripple @2535 .... 2655 MHz	$Pr$		1.0	2.0	dB
VSWR@2535 .... 2655 MHz	$V_{swr}$		1.5	1.8	
Absolute Attenuation	$\alpha$				
DC .... 960.00 MHz		40	50		dB
960 .... 1559.00 MHz		30	40		dB
1559.00 .... 1606.00 MHz		30	35		dB
1606.00 .... 1710.00 MHz		28	33		dB
1710.00 .... 2170.00 MHz		27	32		dB
2170.00 .... 2400.00 MHz		27	30		dB
2400.00 .... 2421.00 MHz		30	35		dB
2421.00 .... 2483.00 MHz		37	40		dB
2750.00 .... 4900.00 MHz		30	34		dB
4900.00 .... 8000.00 MHz		20	29		dB
Input / Output Impedance (Nominal)		50			$\Omega$

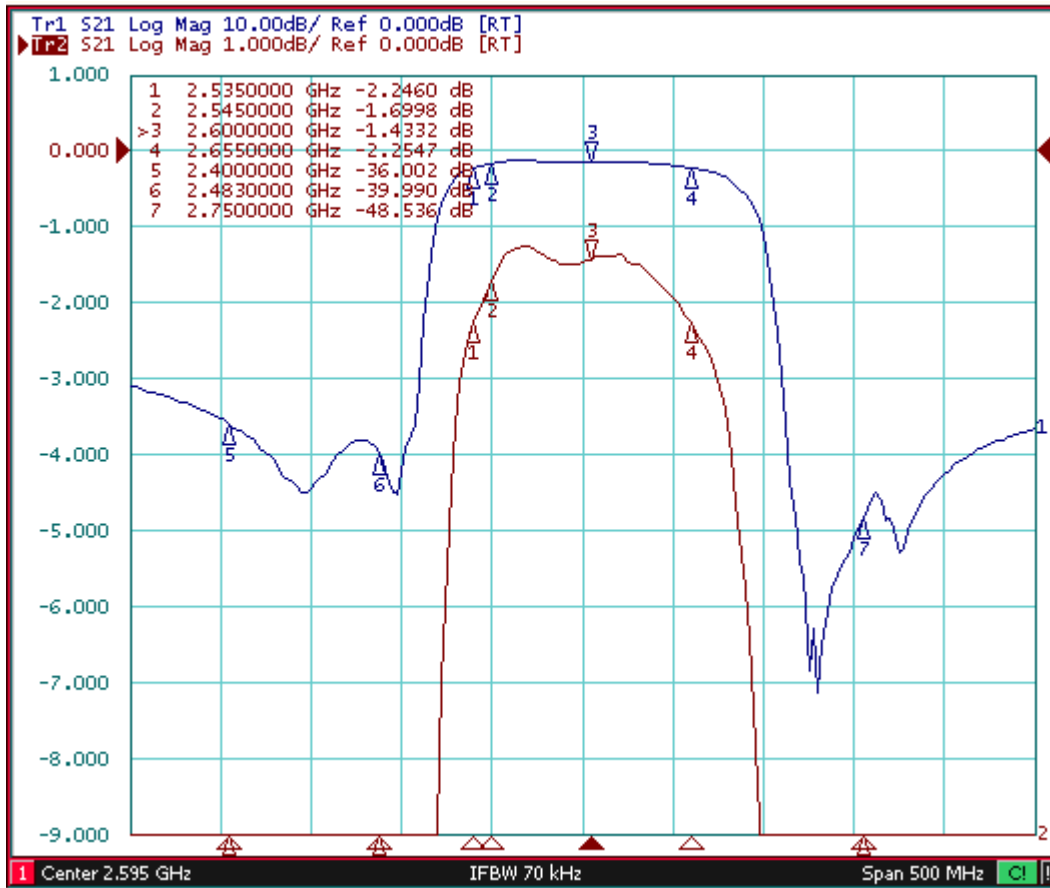
 RoHS Compliant

 Electrostatic Sensitive Device

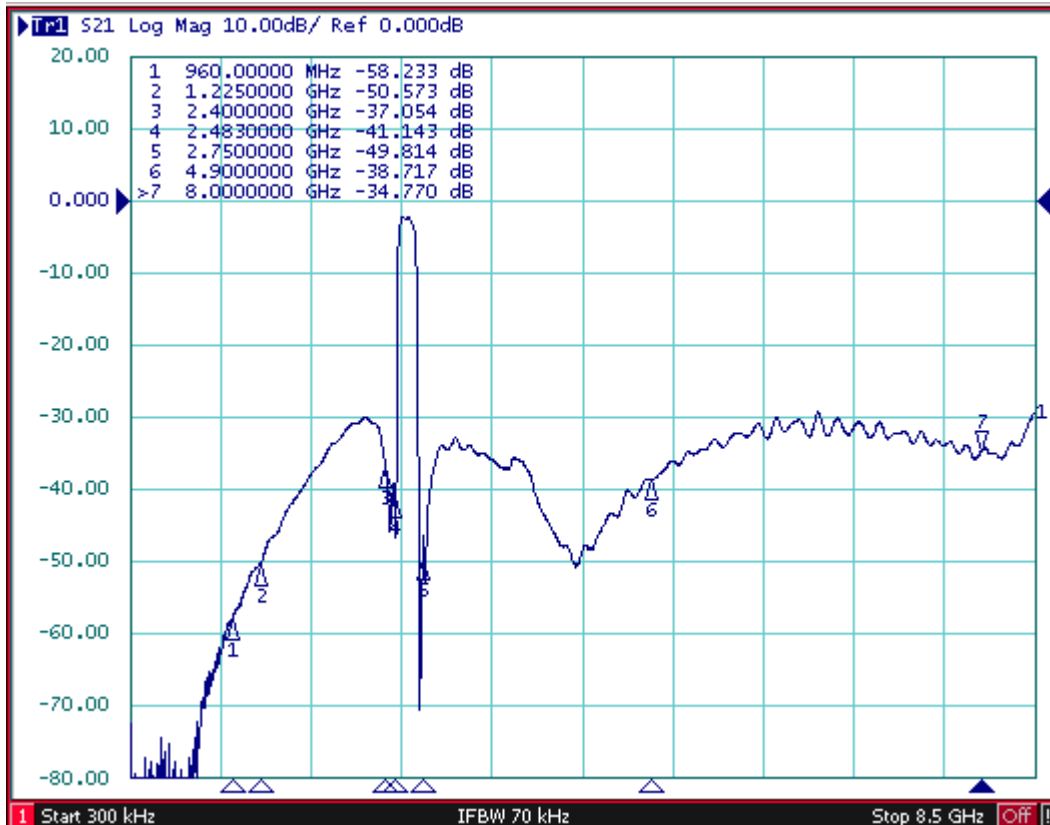
## Test Circuit



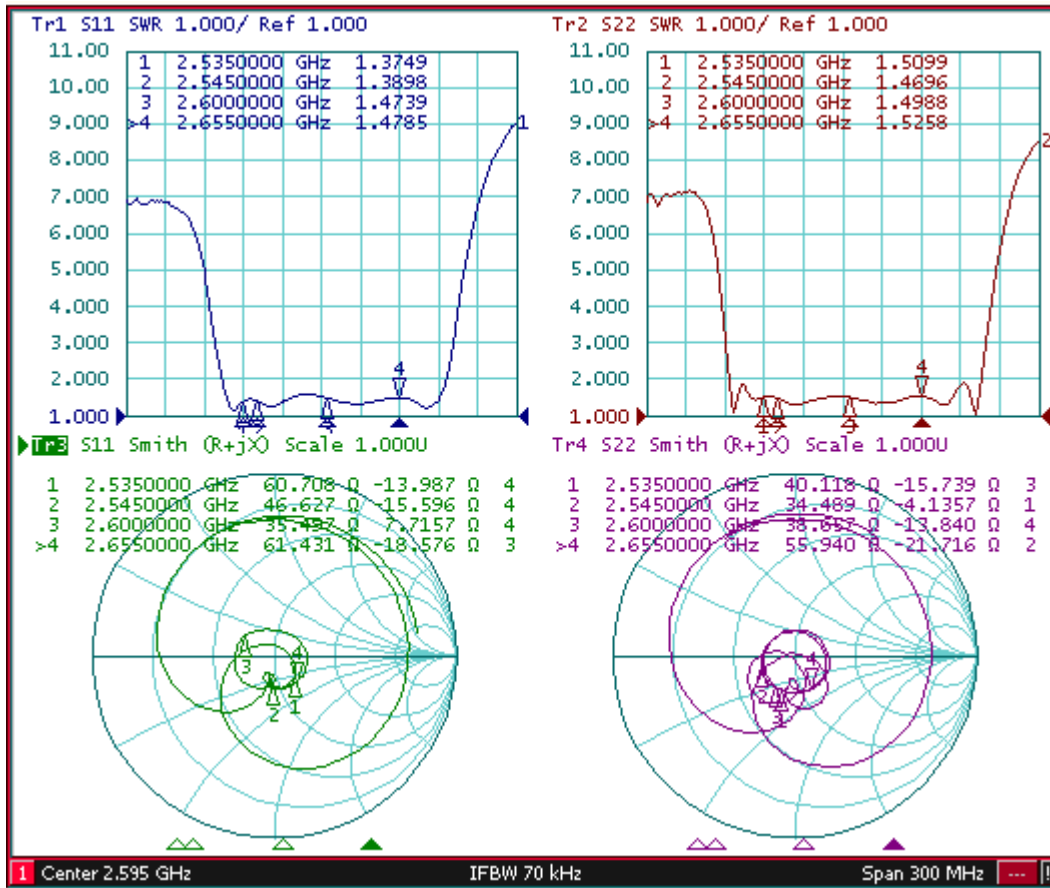
Typical Frequency Response  
S21



Far side



VSWR



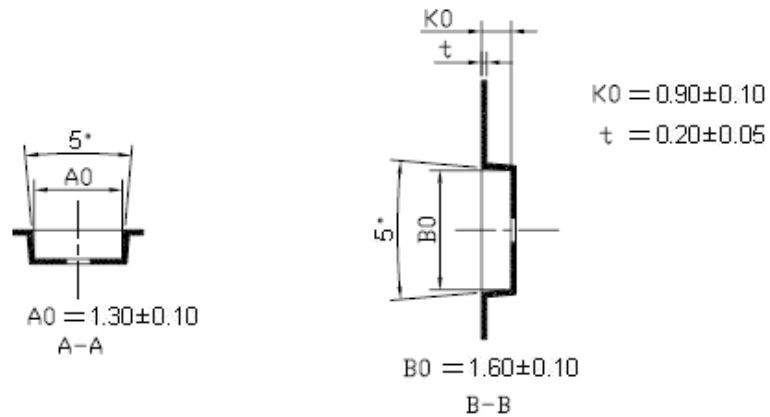
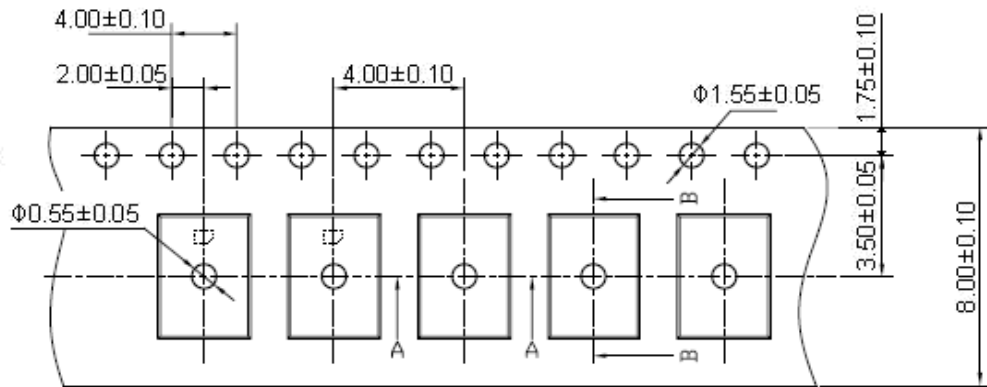
**Stability Characteristics**

Item No.	Test Item	STD Reference	Test Conditions	per lot
	Preconditioning	JESD22-A113	1) Temperature Cycling, 5 cycles -40°C to 85°C 2) Bake, 24 hrs @125±5°C; 3) Reflow, 3 reflow cycles using profiles per IPC/JEDEC J-STD-020, SnPb or Pb-free profile based on device end use process 4) Drying, Room ambient temperature	211
1	Temperature Cycling	JESD22-A104	-40°C / +85°C, 40min dwell, <1 min transfer time, 500cycles	23
2	High Temperature Storage	JESD22-A103	85°C, 240hr	23
3	Low Temperature Storage	JESD22-A119	-40°C, 240hr	23
4	High Temp. High Humidity Storage	JESD22-A106B	85°C, 85%RH, 240hr	23
5	High Temperature Operating	JESD22-A102C	+121°C 100%RH 96hr	23
6	Human Body Mode ESD	JESD22-A114	Measure to get the ESD limits level or margin beyond specification	5
7	Drop Test	IEC 68-2-32	100 cm 3times Steel floor JIG(110g~150g)	6
8	Solder ability	JESD22-B102	Characterization per JESD22-B102	5
9	Vibration, Variable Frequency	JESD22-B103	20 Hz to 2 kHz (log variation) in > 4 minutes, 4X in each orientation, 50g peak acceleration	23
10	Mechanical Shock	JESD22-B104	Y1 plane only, 5 pulses, 0.5 ms duration, 1500 g peak acceleration	23
11	Solder Heat Resistance	IEC 68-2-21 Ue3	±250V, C=100pF, R=1.5kΩ, 1times	11
12	Static marginal test	JESD22-A114F	C=100pF, R=1.5kΩ, 1times ( demand of customer )	11
13	Power capacity Margin Limits	/	Power margin tests beyond input power specification: CW signal, 85°C, highest in-band frequency, 2 hours dwell time for each step, repeat the tests until DUT abnormal	12

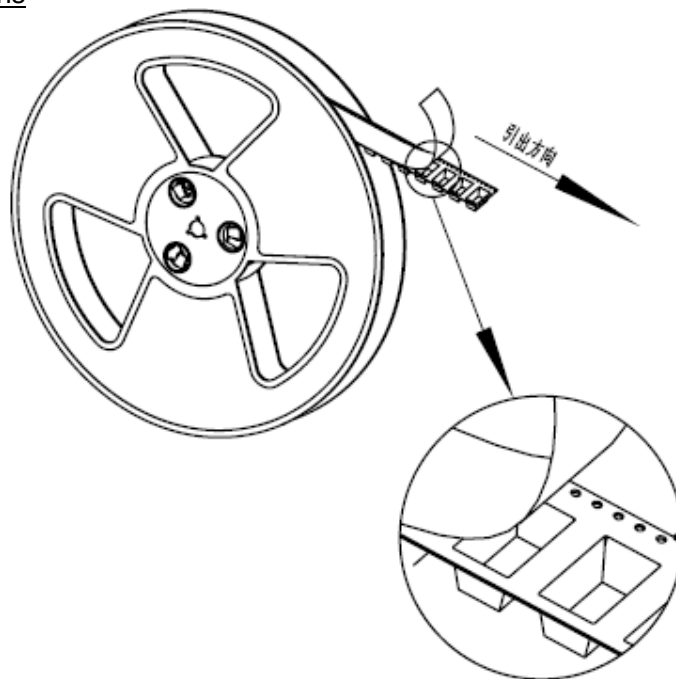
**Requirements:** The SAW filter shall remain within the electrical specifications after tests.

**Packing Information**

Carrier Tape



Reel Dimensions



Material	PS
Unit	mm
Tolerance	$\pm 0.20$ mm
Quantity	4000/reel



Outer Packing

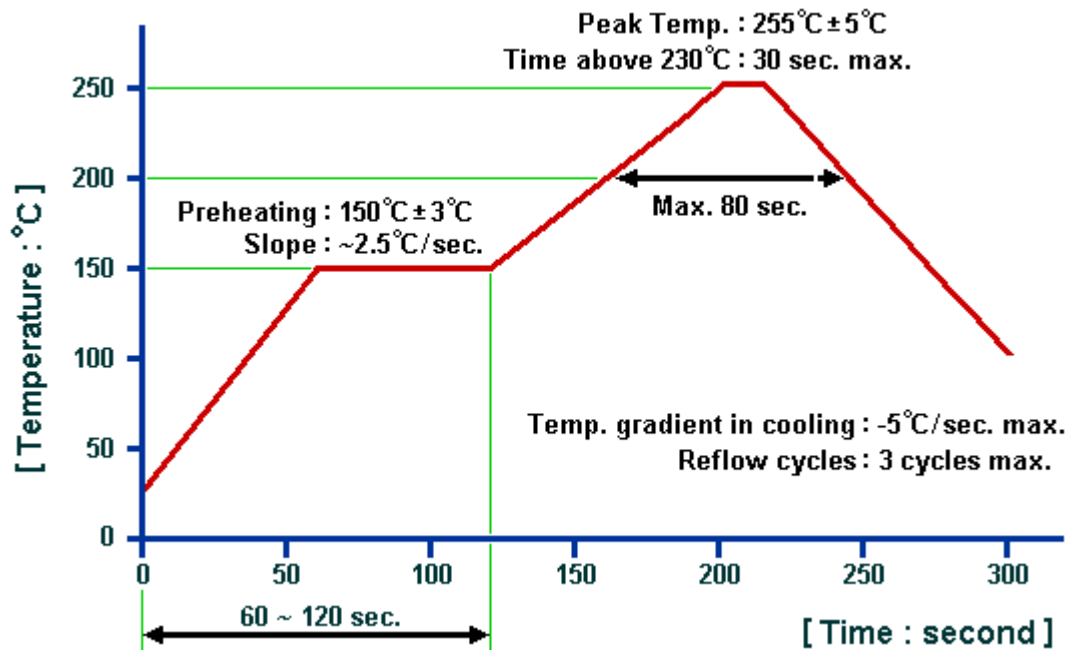
Type	Quantity	Dimension	Description	Weight
Carton Box I	10000	200×200×100	anti-static plastic bag & carton box 1 reel / bag	0.85
Carton Box II	20000	200×200×200	5 bags / box (20000 pcs) 10 bags / box (40000 pcs)	1.80

Unit: mm

Unit: kg

**Remarks**

- SAW devices should not be used in any type of fluid such as water, oil, organic solvent, etc.
- Be certain not to apply voltage exceeding the rated voltage of components.
- Do not operate outside the recommended operating temperature range of components.
- Sudden change of temperature shall be avoided, deterioration of the characteristics can occur.
- Be careful of soldering temperature and duration of components when soldering.
- Do not place soldering iron on the body of components.
- Be careful not to subject the terminals or leads of components to excessive force.
- SAW devices are electrostatic sensitive. Please avoid static voltage during operation and storage.
- Ultrasonic cleaning shall be avoided. Ultrasonic vibration may cause destruction of components.

**Recommended Soldering Profile****©DQHUAYING 2017. All Rights Reserved.**

1. The specifications of this device are subject to change or obsolescence without notice.
2. Typically, equipment utilizing this device requires emissions testing and government approval, which is the responsibility of the equipment manufacturer.
3. Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) per se, not for applications, processes and circuits implemented within components or assemblies.
4. For questions on technology, prices and delivery, please contact our sales offices or e-mail [sales@dghuaying.com](mailto:sales@dghuaying.com).